RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/523,689A
Source: IFW
Date Processed by STIC: 7/11/06

ENTERED

IFWP

RAW SEQUENCE LISTING DATE: 07/11/2006
PATENT APPLICATION: **US/10/523,689A** TIME: 11:09:14

Input Set : **A:\2006-06-05 0760-0343PUS1.ST25.txt**
Output Set: **N:\CRF4\07112006\J523689A.raw**

```
      3 <110> APPLICANT: Masateru YAMADA
      4       Hajimu KURUMATANI
      5       Tetsuo SUDO
      7 <120> TITLE OF INVENTION: REMEDY OR PREVENTIVE FOR KIDNEY DISEASE AND METHOD OF
DIAGNOSING KIDNEY
      8       DISEASE
     10 <130> FILE REFERENCE: 0760-0343PUS1
     12 <140> CURRENT APPLICATION NUMBER: US 10/523,689A
     13 <141> CURRENT FILING DATE: 2005-02-03
     15 <160> NUMBER OF SEQ ID NOS: 28
     17 <210> SEQ ID NO: 1
     18 <211> LENGTH: 21
     19 <212> TYPE: DNA
     20 <213> ORGANISM: Artificial Sequence
     22 <220> FEATURE:
     23 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
kinase 2
     24       subunit gene
     26 <400> SEQUENCE: 1
     27 gtaatcatct tgattacccc a                                              21
     29 <210> SEQ ID NO: 2
     30 <211> LENGTH: 21
     31 <212> TYPE: DNA
     32 <213> ORGANISM: Artificial Sequence
     34 <220> FEATURE:
     35 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
kinase 2
     36       subunit gene
     38 <400> SEQUENCE: 2
     39 ggttggccgg ccgcttgggc c                                              21
     41 <210> SEQ ID NO: 3
     42 <211> LENGTH: 20
     43 <212> TYPE: DNA
     44 <213> ORGANISM: Artificial Sequence
     46 <220> FEATURE:
     47 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein
kinase 2
     48       subunit gene
     50 <400> SEQUENCE: 3
     51 ttcaaatacc aaagctggtg                                              20
     53 <210> SEQ ID NO: 4
     54 <211> LENGTH: 20
     55 <212> TYPE: DNA
     56 <213> ORGANISM: Artificial Sequence
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58 <220> FEATURE:
59 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein kinase 2
60 subunit gene

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Input Set : A:\2006-06-05 0760-0343PUS1.ST25.txt
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62 <400> SEQUENCE: 4
63 atcaaagtct gtcaggatct 20
65 <210> SEQ ID NO: 5
66 <211> LENGTH: 20
67 <212> TYPE: DNA
68 <213> ORGANISM: Artificial Sequence
70 <220> FEATURE:
71 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein kinase 2
72 subunit gene
74 <400> SEQUENCE: 5
75 tggataaagt tttcccagcg 20
77 <210> SEQ ID NO: 6
78 <211> LENGTH: 21
79 <212> TYPE: DNA
80 <213> ORGANISM: Artificial Sequence
82 <220> FEATURE:
83 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein kinase 2
84 subunit gene
86 <400> SEQUENCE: 6
87 accaagtttt cgaacccagt t 21
89 <210> SEQ ID NO: 7
90 <211> LENGTH: 20
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein kinase 2
96 subunit gene
98 <400> SEQUENCE: 7
99 ctgctcatct tgacgtcagc 20
101 <210> SEQ ID NO: 8
102 <211> LENGTH: 20
103 <212> TYPE: DNA
104 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein kinase 2
108 subunit gene
110 <400> SEQUENCE: 8
111 ctcagagcta aagcctcgtg 20
113 <210> SEQ ID NO: 9
114 <211> LENGTH: 20
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein kinase 2
120 subunit gene
122 <400> SEQUENCE: 9
123 acccgaccgc ggcaggcgaa 20
125 <210> SEQ ID NO: 10

126 <211> LENGTH: 20

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127 <212> TYPE: DNA
128 <213> ORGANISM: Artificial Sequence
130 <220> FEATURE:
131 <223> OTHER INFORMATION: antisense oligonucleotide used for inhibition of casein kinase 2
132 subunit gene
134 <400> SEQUENCE: 10
135 gcggcgaccg ctacagcgca 20
137 <210> SEQ ID NO: 11
138 <211> LENGTH: 20
139 <212> TYPE: DNA
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
143 <223> OTHER INFORMATION: oligonucleotide primer used for PCR for amplification of rat case
144 in kinase 2 subunit gene
146 <400> SEQUENCE: 11
147 ccgcggacat aaagatgagt 20
149 <210> SEQ ID NO: 12
150 <211> LENGTH: 20
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: oligonucleotide primer used for PCR for amplification of rat case
156 in kinase 2 subunit gene
158 <400> SEQUENCE: 12
159 aaaccagtgc cgaagtatgc 20
161 <210> SEQ ID NO: 13
162 <211> LENGTH: 20
163 <212> TYPE: DNA
164 <213> ORGANISM: Artificial Sequence
166 <220> FEATURE:
167 <223> OTHER INFORMATION: oligonucleotide primer used for PCR for amplification of rat case
168 in kinase 2 subunit gene
170 <400> SEQUENCE: 13
171 agaaagcttc ggctaataga 20
173 <210> SEQ ID NO: 14
174 <211> LENGTH: 20
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
178 <220> FEATURE:
179 <223> OTHER INFORMATION: oligonucleotide primer used for PCR for amplification of rat case
180 in kinase 2 subunit gene
182 <400> SEQUENCE: 14
183 actgaagaaa tccctgacat 20
185 <210> SEQ ID NO: 15
186 <211> LENGTH: 2178
187 <212> TYPE: DNA
188 <213> ORGANISM: homo sapiens
190 <400> SEQUENCE: 15

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191 gagcagaggg gagacggccg ccgccctggc cgcttccacc acagtttgaa gaaaacaggt     60
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```
193 ctgaaacaag gtcttacccc cagctgcttc tgaacacagt gactgccaga tctccaaaca    120
195 tcaagtccag ctttgtccgc caacctgtct gac atg tcg gga ccc gtg cca agc     174
196                                     Met Ser Gly Pro Val Pro Ser
197                                     1               5
199 agg gcc aga gtt tac aca gat gtt aat aca cac aga cct cga gaa tac      222
200 Arg Ala Arg Val Tyr Thr Asp Val Asn Thr His Arg Pro Arg Glu Tyr
201         10                  15                  20
203 tgg gat tac gag tca cat gtg gtg gaa tgg gga aat caa gat gac tac      270
204 Trp Asp Tyr Glu Ser His Val Val Glu Trp Gly Asn Gln Asp Asp Tyr
205     25                  30                  35
207 cag ctg gtt cga aaa tta ggc cga ggt aaa tac agt gaa gta ttt gaa      318
208 Gln Leu Val Arg Lys Leu Gly Arg Gly Lys Tyr Ser Glu Val Phe Glu
209 40                  45                  50                  55
211 gcc atc aac atc aca aat aat gaa aaa gtt gtt gtt aaa att ctc aag      366
212 Ala Ile Asn Ile Thr Asn Asn Glu Lys Val Val Val Lys Ile Leu Lys
213                 60                  65                  70
215 cca gta aaa aag aag aaa att aag cgt gaa ata aag att ttg gag aat      414
216 Pro Val Lys Lys Lys Lys Ile Lys Arg Glu Ile Lys Ile Leu Glu Asn
217             75                  80                  85
219 ttg aga gga ggt ccc aac atc atc aca ctg gca gac att gta aaa gac      462
220 Leu Arg Gly Gly Pro Asn Ile Ile Thr Leu Ala Asp Ile Val Lys Asp
221         90                  95                  100
223 cct gtg tca cga acc ccc gcc ttg gtt ttt gaa cac gta aac aac aca      510
224 Pro Val Ser Arg Thr Pro Ala Leu Val Phe Glu His Val Asn Asn Thr
225     105                 110                 115
227 gac ttc aag caa ttg tac cag acg tta aca gac tat gat att cga ttt      558
228 Asp Phe Lys Gln Leu Tyr Gln Thr Leu Thr Asp Tyr Asp Ile Arg Phe
229 120                 125                 130                 135
231 tac atg tat gag att ctg aag gcc ctg gat tat tgt cac agc atg gga      606
232 Tyr Met Tyr Glu Ile Leu Lys Ala Leu Asp Tyr Cys His Ser Met Gly
233                 140                 145                 150
235 att atg cac aga gat gtc aag ccc cat aat gtc atg att gat cat gag      654
236 Ile Met His Arg Asp Val Lys Pro His Asn Val Met Ile Asp His Glu
237             155                 160                 165
239 cac aga aag cta cga cta ata gac tgg ggt ttg gct gag ttt tat cat      702
240 His Arg Lys Leu Arg Leu Ile Asp Trp Gly Leu Ala Glu Phe Tyr His
241         170                 175                 180
243 cct ggc caa gaa tat aat gtc cga gtt gct tcc cga tac ttc aaa ggt      750
244 Pro Gly Gln Glu Tyr Asn Val Arg Val Ala Ser Arg Tyr Phe Lys Gly
245     185                 190                 195
247 cct gag cta ctt gta gac tat cag atg tac gat tat agt ttg gat atg      798
248 Pro Glu Leu Leu Val Asp Tyr Gln Met Tyr Asp Tyr Ser Leu Asp Met
249 200                 205                 210                 215
251 tgg agt ttg ggt tgt atg ctg gca agt atg atc ttt cgg aag gag cca      846
252 Trp Ser Leu Gly Cys Met Leu Ala Ser Met Ile Phe Arg Lys Glu Pro
253                 220                 225                 230
255 ttt ttc cat gga cat gac aat tat gat cag ttg gtg agg ata gcc aag      894
256 Phe Phe His Gly His Asp Asn Tyr Asp Gln Leu Val Arg Ile Ala Lys
257             235                 240                 245
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Input Set : A:\2006-06-05 0760-0343PUS1.ST25.txt
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```
259 gtt ctg ggg aca gaa gat tta tat gac tat att gac aaa tac aac att      942
260 Val Leu Gly Thr Glu Asp Leu Tyr Asp Tyr Ile Asp Lys Tyr Asn Ile
261         250                 255                 260
263 gaa tta gat cca cgt ttc aat gat atc ttg ggc aga cac tct cga aag      990
264 Glu Leu Asp Pro Arg Phe Asn Asp Ile Leu Gly Arg His Ser Arg Lys
265     265                 270                 275
267 cga tgg gaa cgc ttt gtc cac agt gaa aat cag cac ctt gtc agc cct     1038
268 Arg Trp Glu Arg Phe Val His Ser Glu Asn Gln His Leu Val Ser Pro
269 280                 285                 290                 295
271 gag gcc ttg gat ttc ctg gac aaa ctg ctg cga tat gac cac cag tca     1086
272 Glu Ala Leu Asp Phe Leu Asp Lys Leu Leu Arg Tyr Asp His Gln Ser
273                 300                 305                 310
275 cgg ctt act gca aga gag gca atg gag cac ccc tat ttc tac act gtt     1134
276 Arg Leu Thr Ala Arg Glu Ala Met Glu His Pro Tyr Phe Tyr Thr Val
277             315                 320                 325
279 gtg aag gac cag gct cga atg ggt tca tct agc atg cca ggg ggc agt     1182
280 Val Lys Asp Gln Ala Arg Met Gly Ser Ser Ser Met Pro Gly Gly Ser
281         330                 335                 340
283 acg ccc gtc agc agc gcc aat atg atg tca ggg att tct tca gtg cca     1230
284 Thr Pro Val Ser Ser Ala Asn Met Met Ser Gly Ile Ser Ser Val Pro
285     345                 350                 355
287 acc cct tca ccc ctt gga cct ctg gca ggc tca cca gtg att gct gct     1278
288 Thr Pro Ser Pro Leu Gly Pro Leu Ala Gly Ser Pro Val Ile Ala Ala
289 360                 365                 370                 375
291 gcc aac ccc ctt ggg atg cct gtt cca gct gcc gct ggc gct cag cag     1326
292 Ala Asn Pro Leu Gly Met Pro Val Pro Ala Ala Ala Gly Ala Gln Gln
293                 380                 385                 390
295 taa cggccctatc tgtctcctga tgcctgagca gaggtggggg agtccaccct          1379
297 ctccttgatg cagcttgcgc ctggcgggga ggggtgaaac acttcagaag caccgtgtct   1439
299 gaaccgttgc ttgtggattt atagtagttc agtcataaaa aaaaaaatta taataggctg   1499
301 attttctttt ttctttttt tttaactcga acttttcata actcagggga ttccctgaaa   1559
303 aattacctgc aggtggaata tttcatggac aatttttttt tctcccctcc caaatttagt   1619
305 tcctcatcac aaaagaacaa agataaacca gcctcaatcc cggctgctgc atttaggtgg   1679
307 agacttcttc ccattcccac cattgttcct ccaccgtccc acactttagg gggttggtat   1739
309 ctcgtgctct tctccagaga ttacaaaaat gtagcttctc aggggaggca ggaagaaagg   1799
311 aaggaaggaa agaaggaagg gaggacccaa tctataggag cagtggactg cttgctggtc   1859
313 gcttacatca ctttactcca taagcgcttc agtggggtta tcctagtggc tcttgtggaa   1919
315 gtgtgtctta gttacatcaa gatgttaaaa tctacccaaa atgcagacag atactaaaac   1979
317 tctgtcagta gatcatgtct tactgatcta accctaaatc caactcattt atacttttat   2039
319 ttttagttca gtttaaaatg ttgatacctt ccctcccagg ctccttacct tggtcttttc   2099
321 cctgttcatc tcccaacatg ctgtgctcca tagctggtag gagagggaag gcaaaatctt   2159
323 tcttagtttt ctttatctt                                              2178
325 <210> SEQ ID NO: 16
326 <211> LENGTH: 1677
327 <212> TYPE: DNA
328 <213> ORGANISM: homo sapiens
330 <400> SEQUENCE: 16
331 tgtcacccag gctggagtgc agtggcgcaa tctcagctca ctgcaacctc cacctccctg     60
333 gttcaagcga ttctcctgcc tcctccgccc gacgccccgc gtcccccgcc gcgccgccgc    120
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/11/2006
PATENT APPLICATION: **US/10/523,689A** TIME: 11:09:15

Input Set : **A:\2006-06-05 0760-0343PUS1.ST25.txt**
Output Set: **N:\CRF4\07112006\J523689A.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:20; N Pos. 2,13,15
Seq#:21; N Pos. 2,4,10,11,13,17
Seq#:22; N Pos. 2,13,15
Seq#:23; N Pos. 2,4,10,11,13,17
Seq#:24; N Pos. 2,4,5,8,13,17
Seq#:25; N Pos. 3,7,9,10,16,18

VERIFICATION SUMMARY DATE: 07/11/2006
PATENT APPLICATION: **US/10/523,689A** TIME: 11:09:15

Input Set : **A:\2006-06-05 0760-0343PUS1.ST25.txt**
Output Set: **N:\CRF4\07112006\J523689A.raw**

L:703 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:741 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:769 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:807 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:846 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:884 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0